Rescuer Beware!

Possible implication of airbag recalls

by Len Watson

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ResQmed Ltd, St Andrews House, 21 Head Street, Halstead, Essex CO9 2AU, ENGLAND

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www.carguide.com.au reported that in Australia there have been problems with unexplained airbag deployments both on some European and Australian models. This has instigated a number of airbag replacements at Ford and a massive recall of Holden Commodore models due to airbag deployments outside of normal parameters. The recall of 120,000 vehicles from April 2003 to December 2005 affected vehicles sold in Australia and the export market with side impact airbags fitted as standard or as an optional extra. Holden puts the deployment down to a static electricity charge, which activated the airbag inflator where the earth wire had come loose.

Holden have been notified of only thirteen incidents since 2003 and say - “the condition can only arise when the car is stationary and the person is exiting one of the front seats. Sufficient charge must be generated while, at the same time, the outside of the seat's lateral padding is compressed sufficiently to reach the seat mounted airbag’s inflator. Electrostatic charge usually requires some sort of moving activity which can be generated while getting in or out of the seat.

Implication to rescuers -

On considering this information in terms of the rescue effort, after the vehicle has suffered a frontal impact and the occupant requires to be removed from the front seat, it would seem to hold a degree of hidden danger as side airbags will remain undeployed. Although we can equate from the 13 deployments reported that the risk would appear to be extremely low, we are still left with the legacy that it did happen and could happen again. Consider, in a frontal impact, sufficient to occasion serious injury and/or entrapment, the earth wire would be more vulnerable to disconnection and pressure on the seat's lateral padding subjected to a greater pressure as the casualty is slid out of the seat.

What we should also keep in the back of our mind, is the understanding that this predicament could possibly arise with other makes and models of vehicles and may not be just an Australian or European problem. In analysing the situation in terms of rescue, perhaps an increased awareness is necessary and suitable instructions given to prevent inadvertent deployment as casualties are removed from the wreckage. In view of the types of fabric used for seat coverings and with the incorporation of electronic seat sensing, the following would seem to be a good starting point -

- Make all Rescuers aware that the possibility for SIPS deployment actually exists even after the battery has been disconnected.

Gas generator

Outside lateral seat support

Entrainment extrication where roof and side removal have been performed to allow for the introduction of the long spine board for in-line removal of the patient.
• Give the following instructions
  → **ALWAYS** - switch off vehicle’s ignition/ready-go/keyless-go and remove the transponder to a safe place at least 5 meters/15 feet away from the vehicle. Where appropriate, disconnect the battery.
  
  **NOTE** – *In some situations it may be inappropriate to disconnect the battery or it may not be accessible to disconnect.*
  
  → Where the seat is equipped with an electronic airbag, **DO NOT** lean against or kneel on the seat’s outside lateral squab/s (particularly when the seat is in the reclined position).

![Image of a person lying on a spine board]

*Use of the long spine board to remove a front seat casualty in-line over the rear of the car.*

![Image of a person being removed from the car side]

*In some circumstances in-line removal may not be possible and the casualty will have to be removed via the side of the car.*

→ **ALWAYS use** a long spine board (Apart from this being the correct way to remove the casualty, it will distribute load and reduce static accumulation).

→ Where possible, **enforce the 500 and 150mm (20 and 6 inch) rule**. When using the long spine board, keep in mind airbag deployment path and estimate its trajectory when positioning and removing the casualty. With the larger casualty this may not be possible and it will be necessary to make a judgement call weighing benefit v's risk.

**NOTE** – *Where the seatback is reclined, airbag deployment path will alter accordingly.*

**WARNING**
To inadvertently activate the seat mounted airbag could possibly deploy all SIPS on the same system. *For further information, go to* - www.resqmed.com/SRSlogicSm.htm

We trust that this information will be treated with respect and not used to gain a 'knee-jerk' reaction. We are circulating this information with a view to inspire the informed study of Extrication Rescue. If you wish to contribute or have a query we would appreciate hearing from you. Simply click on this link - [Send To] - address to lenwatson@resqmed.com